DOCUMENT RESUME

ED 054 778 LI 002 996

AUTHOR Anders, Mary Edna

TITLE Library and Reference Applications: Census Tapes and Printed Reports.

SPONS AGENCY Bureau of the Census (DOC), Suitland, Md.

PUB DATE Jun 71

NOTE 10p.; (7 References); Paper Prepared for 1970 Census Data Applications Conference at University of Tennessee, February 23, 1971

EDRS PRICE MF-$0.65 HC-$3.29

DESCRIPTORS *Census Figures; *Information Services; *Information Sources; Librarians; Library Collections; Library Planning; *Library Services; *Magnetic Tapes; Use Studies

ABSTRACT

Census tapes are not a ready reference tool and must be supported by appropriate program tapes. However, census materials provide the single, most important sources of information and measures which, properly used, provide a better understanding of our society. In utilizing census products, librarians need to fill the role of a user, as well as that of middleman or distributor. Census data can contribute to planning library services and collection development, cooperation, and analyzing and evaluating services for the librarian in the role of a user. The librarian as a middleman must provide access to printed reports, assistance in use, indexing, and information about tapes and tape use. Users will be planning and development agencies, local organizations, local businessmen and students. (AB)

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LIBRARY AND REFERENCE APPLICATIONS: CENSUS TAPES AND PRINTED REPORTS

Dr. Mary Edna Anders
Georgia Institute of Technology

U.S. DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C.

June 1971

LI 002 996

(DOC), Suitland, Md.
LYR 05403

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LIBRARY AND REFERENCE APPLICATIONS: CENSUS TAPES AND PRINTED MATERIALS*

Last week we received from a utility company located in the Midwest an attractive little pamphlet intended for citizens who want to organize a development program for their communities. I particularly enjoyed some Confucius-style comments that appear at random throughout the pamphlet. These witticisms, set off from the text and printed in bold face type, catch your eye immediately.

I am very grateful for the arrival of that Midwest pamphlet because one of those statements provides an excellent framework for the introductory portion of my presentation today. "There are good sound reasons and there are reasons that sound good." This statement now becomes my introductory theme.

Librarians should be interested in and keenly concerned with the census reports and especially census tapes. There are good sound reasons why this is so and then there are also some reasons that merely sound good.

The "sound good reasons" we can review quickly and dismiss. We do need to accord them brief attention because they involve some misconceptions that can negatively affect planning for the use of the tapes.

It sounds good to say: "Because we now have access to census results on computer tapes, all our troubles with local statistical measures are ended. We can now supply you immediately with all you want to know (but were afraid to ask) about population and housing." This sounds good - evokes images of the highly efficient librarian, the impressive computer, the turning wheels, the printing printer, and the satisfied patron.

It sounds good but it varies considerably from practicality and actuality. And if you are interested in the tapes for some of the reasons implied in the preceding paragraph - forget it. You are going to be disappointed. That "sounds good" statement repeats several misconceptions about the census tapes. Let's dispose of three of them.

1. The census tapes <u>will</u> contain more information than the published reports, <u>but</u> they will not answer every question that is presented at the reference desk. We need to remind ourselves of the fact that neither the tapes nor the published reports can supply data other than that collected by the questionnaires we completed last spring. Remember those questionnaires? Some subjects covered in earlier censuses (e.g., condition of dwelling and illiteracy) are now omitted. The tapes <u>will</u> <u>not</u> supply answers to every question that concerns either population or housing.

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*Prepared by Dr. Mary Edna Anders, Head, Basic Data Branch, Industrial Development Division, Georgia Institute of Technology, for delivery at the 1970 Census Data Applications Conference at the University of Tennessee, February 23, 1971.

2. The presentations you have heard this morning certainly make it clear that the tapes don't provide quick answers. It is true that complicated analyses can be accomplished quickly and printed out rapidly once appropriate programs have been developed. But the tapes are not a ready reference tool. They are instruments of research that can provide the basis for the potential ready reference tool.

3. The implication that the library will incorporate tapes into the collection and handle and circulate them as it does other library materials sounds good, but I personally am convinced there are sound reasons why this will not normally be the case. First, as you have learned, the tapes by themselves are, in effect, useless. To work with the tapes one must have the appropriate supporting program tapes. Moreover, the tapes are available in different formats, designed for use with specific hardware or computer configurations. A set of tapes with the essential supporting tapes carries a very expensive price tag and could be used by only a few of the library's patrons. The Census Bureau has, I think, mistakenly fostered the idea that libraries will acquire and circulate tapes and even suggested that they will provide statistical analysis! However, in more recent materials, the Bureau's emphasis has been on the role of libraries in providing information about data on tape.

In my opinion, we librarians never really learned to use the printed reports, so it borders on the ridiculous for us to be talking about using census tapes. I do not mean to condemn us completely as you will soon hear - what I am saying is that I fear that we hope that the tapes will solve all of the census problems that have confronted us, and this will not be the case.

Let me live up to my promise to be brief with the "sound good" reasons and direct your attention instead to some of the good sound reasons why we as librarians and information specialists have to be interested in the results of the 1970 census and the forms in which they will be released.

A good and a sound reason: census materials provide us with the single most important source of information and measures which, properly used, give us the basis for a better understanding of our society (whether it be local, state, regional, or national) and for identification of the trends that have influenced the growth and change of our society and are helping to shape its future. The facts are there; we have to analyze and interpret them - properly use them. Speaking from a library-reference viewpoint, there is no other resource that can compare to the census in comprehensiveness, authority, or accuracy. With all its weaknesses, and they do exist, the census remains a marvelous, monumental resource.

Last summer just as the preliminary data from the 1970 census were beginning to appear, I had an experience that emphasized the true merits of our census. I talked with a group of visiting Latin Americans on use and

evaluation of census publications. They had many questions - mostly concerning the value we place on the census and our acceptance of the results. I am sorry to confess they were leaving before I got the true import of their questions. They mistrust a census. In their various countries they felt the official results of the census were contrived or rigged to make conditions look better than in fact they were. In this country, I explained, the situation was reversed. Local leaders were convinced that the population was greater than the census had indicated. I longed for time to show the visitors some newspaper accounts of these local complaints.

We do have an important reference resource in our census - a good sound reason for our being interested in all changes relating to it.

Let me emphasize, however, the "properly used factor" that I mentioned earlier. The data contained in the printed reports or on the computer tapes possess limited significance by themselves. They must be analyzed and studied - usually in relation to other factors. To suggest that a library staff will perform the essential analysis for its patrons is, to me, about as reasonable as suggesting that the library operate a unit pursuing alchemy.

Although librarians will not normally analyze or interpret census data for library patrons, they must become more knowledgeable about census materials in order to serve their patrons more effectively and to exploit census data for library purposes.

When I refer to census data or census materials, I have to remind myself that today we are concerned only with the 1970 decennial census - population and housing - and that the results of the various other censuses - agriculture and so on, even the Current Population Survey reports series - are excluded from our consideration.

Because I am accustomed to thinking of these reports taken together as a tremendous data bank, I am going to digress slightly for a personal reference. Since 1966, we have conducted over 50 training programs or workshops at the Industrial Development Division ranging from one day to two weeks in length. Participants have come from all over the nation, and include developers, planners, librarians, and community leaders. In these training sessions I normally handle at least one unit devoted to information resources. You would be astounded at the number of librarians and developers who for all practical purposes are unacquainted with the decennial and other censuses. Even more surprising, you would not believe the number of calls we receive from developers asking us to supply census data because the local library does not have the reports for their state. I mention this because it indicates that many librarians have not demonstrated an appreciation or understanding of the importance of the census to the communities they are serving.

With this background let us now explore the relationship between the librarian and the use of census tapes and reports.

My remarks will be focused around the dual role librarians should assume where census products are concerned. I do not mean dual in the sense of Dr. Jekyll/Mr. Hyde - a good and a bad role, but rather two distinct positive roles. It might be more precise to say that librarians need to assume two responsibilities in relation to the census products.

First, librarians need to fill the role of a user. They are responsible for incorporating the results of the census into the formulation and implementation of plans for their library operations and programs.

Second, librarians need to occupy the role of middle man or distributor where census products are concerned. They are responsible for assisting library patrons to locate and use census data which will help to solve their individual problems or the problems of the community. But this responsibility does not include statistical analysis.

In the time remaining at my disposal I intend to analyze these two roles and to suggest ways in which the responsibilities attendant to the two roles can be met. I have referred thus far to librarians or libraries without any differentiation as to type. The time has come to introduce some distinctions. The users of census data in library program planning will be almost exclusively public librarians. Academic and school librarians are more likely to find that the use of the data by their parent institution, the university or public school system, will influence the library's planning, so the relationship is not a direct one. Keep in mind, therefore, that the following suggestions apply primarily to public libraries unless otherwise indicated.

The results of the 1970 census provide potential inputs for library program development in at least four distinct areas.

1. In reviewing or establishing the physical organization of the library system, whether it be a regional, county, or municipal system, data on total population and population density should assist the administration in the identification of major service points. These kinds of data can be obtained from the printed reports, but the tapes contain so much more information about small areas that access to the tapes appears to be highly desirable. In addition, where multi-county library systems are concerned, the tapes can be utilized to aggregate or group county data and manipulate the data more effectively than is possible with the printed reports.

To assist you in evaluating the application of census tapes for this purpose, there are a couple of publications that may be helpful as supplements to those you are already acquainted with from the literature of

librarianship. Take a look at Nelson's The Selection of Retail Locations[1] for general techniques involving the use of census data. Then review the November 1967 Census Bureau publication Some Uses of Census Tracts in Private Business.[2] That report presents seven examples of location problems and is well worth your examination.

2. Census data can contribute significantly to planning of library services and to collection development. If the public library is truly a social institution then it must be responsive to social change, to the trends that emerge in the communities it serves. Census data help to identify and explain some of these trends and consequently can provide useful guides to the directions that you should be considering. Let's take several illustrations.

Basic data on age, occupation, income and other characteristics will provide profiles of the population residing in the various areas you serve. In some cases the data will merely confirm what you already know, but they will provide some very specific measures of the total population including those who use library resources and those who don't. They may reveal some very significant changes in population characteristics. For example, I am eager to see what the census will report regarding employment in the service trades. For some years now authorities have predicted that by 1980 seven out of ten employed will work in a service capacity. Do the 1970 returns confirm this trend in the areas you serve? If so, what are the implications in terms of materials you need to add to the collection? Will this trend exert an impact on hours of service, points of service, kinds of service? Another interesting possibility would involve analyzing data on TV's in homes to evaluate the feasibility of library TV programs.

Many of the programs being pushed by the present national administration are directed towards the disadvantaged, and libraries definitely must be responsive to such programs. 1970 census data on income levels will help identify the pockets of poverty, thereby assisting in planning of service programs. Along the same line, poverty data and educational data should be useful in planning activities supporting the Right-to-Read effort, another high priority program of this administration.

These possible applications of census data to the planning of library services require access to the detailed social and economic characteristics which will be included in the published reports, mainly chapter C of the

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1/ Richard L. Nelson, The Selection of Retail Locations. N.Y.: F. W. Dodge Corp., 1958.

2/ U.S. Bureau of the Census, GE-40 Series, No. 3, Some Uses of Census Tracts in Private Business by Wilbur McCann, November 1967, 20¢.

population reports (PC(1)-C), but will be covered in greater detail in the Fourth Count tapes. I suspect your best source for ideas as to ways in which you can investigate possibilities for the service area will be the Census Use Study reports produced in connection with the 1967 special census conducted in New Haven. Report No. 8 on Data Uses in Health Planning[3] and No. 10 on Data Uses in School Administration[4] probably have more relevance for our problems. You must exercise your imagination when you consult these Census Use Study reports. They are, however, the only references that I know to suggest.

3. A third potential use of the census relates to cooperation, and I'll admit it's a way out possibility. Do you know about journey to work data in the census - data that report the means by which people get to work and from whence they come? Commuting patterns have no relationship to boundaries of governmental units or of library service areas. With our highly mobile work population, I can't help wondering if an analysis of journey to work data would not offer some hints about contracts for service or for inter-library cooperative projects. In this area I have no published studies to commend to your attention.

4. The fourth and final area in which census data can contribute to library planning is in analyzing and evaluating services. Here library records would have to be coordinated with census data, and the tapes and the address coding guide would have to be utilized. Would it not be enlightening to prepare the library's registration file so you could map the registration and compare it to computer produced maps of the area showing, say, density of population, income level, education level, or similar characteristics. You may be able to see the results of the opening of a new branch or the impact of a program for senior citizens. To get some ideas about computer mapping, see Census Use Study Report No. 2.[5]

These four areas illustrate ways in which census results can provide inputs into your own programs. In each case you would become the immediate user of census data, and because you want to manipulate the data and want all the detail possible, the tapes are more desirable than the printed reports. If this be the case, what do you do to make use of them? There are several alternatives. Because of what I've said earlier you know I don't advise you to acquire the tapes and carry out your own analysis. It is possible for you to contract with a commercial firm and have them do the

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3/ U.S. Bureau of the Census, Census Use Study: Data Uses in Health Planning, Report No. 8, June 1970, 50¢.

4/ U.S. Bureau of the Census, Census Use Study: Data Uses in School Administration, Report No. 10, April 1970, 25¢.

5/ U.S. Bureau of the Census, Census Use Study: Computer Mapping, Report No. 2, August 1969, 25¢.

work for you, but by so doing you lose some major benefits. The most satisfactory approach appears to be to tie into State and/or regional programs and to utilize facilities operating with the State.

Ideally, I believe the State library agency should take the leadership and handle the preliminary work. By preliminary work I mean the accumulation of relevant, descriptive materials which are then reviewed by interested librarians. Assisted by the feedback from this review, I'd like to see the State agency prepare an agenda and call a meeting which would include not only the interested librarians but also technical personnel and representatives of the Summary Tape Processing Centers. Out of the discussion and exchange should emerge some realistic decisions on what kinds of applications would be most useful to librarians and the best approaches that could be taken to obtain the necessary statistical analysis. Librarians who wanted to pursue the use of the tapes could then do so and duplication of effort devoted to planning and technical activities would be reduced to a minimum. Moreover, as individual library agencies conducted their studies, a Statewide picture would begin to emerge.

Work with the tapes will not be inexpensive, and the possibility that tape users with similar, non-conflicting needs will go their own independent little ways instead of collaborating disturbs me greatly. Those of us who represent public agencies need to avoid this at all costs. In practice, librarians can utilize some of the same analyses that other community agencies and institutions need, agencies such as Councils of Governments, Economic Development Districts, community action groups, and planning bureaus. We must, therefore, (1) define our own data needs, and (2) identify and affiliate with other agencies whose interests and needs are similar to ours. Would it be possible to get a Voc-Tech school to do some work for you as part of its instructional program in computer technology?

Now shift your attention to the librarian's role as the middle-man, a distributor of the products of the Census Bureau. We share in the responsibility for stimulating, fostering, and ultimately increasing the use of census data by the public. My earlier remarks about the significance and value of census materials explain and justify our concern. Our basic mission dictates that we be equipped to utilize every major information resource. If we achieve this objective in relation to the census, we should be prepared to provide most of the following specific services and information.

1. Access to printed reports. Obviously you achieve this by purchasing, in multiple copies if need be, appropriate reports. Microfiche copies are also available. Your collection would certainly include the reports for your own State and possibly adjoining States. You also need to know where copies of the reports for other States can be located and where all the special reports can be found. You need to be able to supply quickly probable dates of availability of the various publications.

2. Assistance in the use of printed reports. You must be able to instruct the uninformed in techniques for using the reports effectively.

3. Indexing of reports. Closely related to the second service, you could profitably consider the preparation of an index to the reports for your State. This could be done independently or in cooperation with other agencies. The reports are not easy to use without study and they are it for a decade. The availability of an index will conserve a significant amount of library staff and user time over the years.

4. Information about tapes. You should have available general information about the tapes, their contents, and their suggested and potential applications. You must be prepared to discuss them in an intelligent, understanding manner with anyone who has a need to know.

5. Information about tape use in your State and an awareness about tape use elsewhere. You should be able to supply information concerning local and relevant programs elsewhere based on tape usage. Be prepared to identify public and private organizations providing census tape services. Get word to local agencies about articles such as those in New Mexico Business[6/] and Pennsylvania Department of Community Affairs' Courier[7/] which describe or outline anticipated applications in those states.

I believe that librarians should make the library the clearinghouse for information about census tape usage. You should invite representatives from chambers of commerce, banks, city planning agencies, Economic Development Districts, Councils of Governments, schools, and similar agencies in your region to meet in the library and discuss the tapes and any preliminary planning for their use. Don't wait for the agencies to contact you - they may never do it.

In order to focus our thinking and planning more specifically, let us characterize some of the users and uses to which our services should be directed.

1. Planning and development agencies. Their personnel will usually know more than the librarians about both the tapes and the published reports. The chief contribution you can make to them is to insure they are aware of Bureau publications, such as Small-Area Data Notes, which they should be receiving, and of other agencies utilizing the tapes.

2. Local organizations. Organizations such as the chamber of commerce are usually less knowledgeable but have a definite need for all kinds of

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6/ Larry D. Adcock, " The Bureau of Business Research as a Summary Tape Processing Center," New Mexico Business, July 1970, pp. 6-7 and 9.

7/ "Utilization of Census Summary Tape Data by Local Government Units, Agencies, and Authorities," Courier, October 12, 1970, pp. 1-3 and 7-8.

service. We have helped a religious group use census data in locating a church, for example.

3. Local businessmen. They know little or nothing about the census, unless their firms are large enough to have market research divisions. You have a real opportunity, for instance, to get housing data and socio-economic characteristics to real estate and land development companies. In the case of businessmen with major marketing problems, you need to be able to direct them to the public or commercial services that can provide the analysis of census data that is needed.

4. Students. Student need is primarily the concern of academic libraries. They need access to census data to complete class assignments. In addition, if they are enrolled in certain subject areas, they need instruction in use of the data as part of their academic and professional training.

Summary

Let me conclude with some guidelines for you about using the census:

1) The census results are important to librarians. Learn as much as you can about them and about the forms in which they are being released.

2) Brainstorm about ways you can use census data to strengthen your programs.

3) Work with the technicians. You do not have to be a programmer in order to make use of the tapes.

4) Get involved with the users of the tapes. The Census Use Study, concerning data needs of local agencies, does not even recognize the library as an agency needing data. We librarians do need the data!